

assigned to a single system on an exclusive basis.

(12) Applications for control stations operating below 470 or above 800 MHz and meeting the requirements of § 90.119(a)(2)(ii).

(13) Applications for frequencies in the 216–220 and 1427–1435 MHz bands.

(14) Applications for frequencies in the 220–222 MHz band.

[51 FR 14998, Apr. 22, 1986, as amended at 51 FR 36014, Oct. 8, 1986; 53 FR 1024, Jan. 15, 1988; 54 FR 4030, Jan. 27, 1989; 54 FR 39740, Sept. 28, 1989; 56 FR 19602, Apr. 29, 1991; 56 FR 65859, Dec. 19, 1991; 57 FR 48739, Oct. 28, 1992; 57 FR 60135, Dec. 18, 1992; 58 FR 62291, Nov. 26, 1993; 60 FR 37261, July 19, 1995; 62 FR 18925, Apr. 17, 1997; 63 FR 44586, Aug. 20, 1998]

§ 90.176 Coordinator notification requirements on frequencies below 512 MHz.

(a) *Frequencies below 470 MHz.* Within one business day of making a frequency recommendation, each frequency coordinator must notify and provide the information indicated in paragraph (e) of this section to all other frequency coordinators who are also certified to coordinate that frequency.

(1) The applicable frequency coordinator for each frequency is specified in the coordinator column of the frequency tables of §§ 90.20(c)(3) and 90.35(b)(3).

(2) For frequencies that do not specify any frequency coordinator, all certified in-pool coordinators must be notified.

(3) For frequencies that are shared between the Public Safety Pool and the Industrial/Business Pool (frequencies subject to §§ 90.20(d)(7), (d)(25), (d)(34), or (d)(46) in the Public Safety Pool, and subject to §§ 90.35(c)(13), (c)(25), or (d)(4) in the Industrial/Business Pool), all certified coordinators of both pools must be notified.

(b) *Frequencies in the 470–512 MHz band.* Within one business day of making a frequency recommendation, each frequency coordinator must notify and provide the information indicated in paragraph (e) of this section to all other certified frequency coordinators in the Public Safety Pool and the Industrial/Business Pool.

(c) Each frequency coordinator must also notify all other certified in-pool coordinators on any day that the fre-

quency coordinator does not make any frequency recommendations.

(d) Notification must be made to all coordinators at approximately the same time and can be made using any method that ensures compliance with the one business day requirement.

(e) At a minimum the following information must be included in each notification:

- (1) Name of applicant;
- (2) Frequency or frequencies recommended;
- (3) Antenna locations and heights;
- (4) Effective radiated power (ERP);
- (5) Type(s) of emissions;
- (6) Description of the service area; and
- (7) Date and time of recommendation.

(f) Upon request, each coordinator must provide any additional information requested from another certified coordinator regarding a pending recommendation that it has processed but has not yet been granted by the Commission.

(g) It is the responsibility of each coordinator to insure that its frequency recommendations do not conflict with the frequency recommendations of any other frequency coordinator. Should a conflict arise, the affected coordinators are jointly responsible for taking action to resolve the conflict, up to and including notifying the Commission that an application may have to be returned.

[62 FR 18926, Apr. 17, 1997]

§ 90.177 Protection of certain radio receiving locations.

This section pertains to applications for new or modified authorizations in the vicinity of the National Radio Astronomy Observatory, Green Bank, Pocahontas County, WV; the Naval Radio Research Observatory, Sugar Grove, Pendleton County, WV; the Arecibo Observatory, which is part of the National Astronomy and Ionosphere Center, located near Arecibo, PR; the Table Mountain Radio Receiving Zone, Boulder County, CO.; the Federal Communications Commission monitoring stations; and other protected sites.

(a) Any applicant for a new permanent base or fixed station, or for a

modification of an existing authorization which would change the frequency, power, antenna height, directivity, or location within the boundaries described in paragraph (b) of this section shall notify the Director, National Radio Astronomy Observatory, P.O. Box 2, Green Bank, WV 24944, in writing, of the technical parameters of the proposal.

(1) The notification shall be made prior to, or simultaneously with the filing of the application with the Commission.

(2) The notification shall state the geographical coordinates of the antenna, antenna height, antenna directivity, proposed frequency, type of emission, and effective radiated power.

(3) After receipt of such applications, the Commission will allow a period of 20 days for comments or objections in response to the notifications indicated. If an objection to the proposed operation is received during the 20-day period from the National Radio Astronomy Observatory for itself or on behalf of the Naval Radio Research Observatory, the Commission will consider all aspects of the problem and take whatever action is deemed appropriate.

(4) The provisions of this paragraph do not apply to applications for mobile, temporary base, or temporary fixed stations.

(b) The area of concern for the National Radio Astronomy Observatory or the Naval Radio Research Observatory is the area bounded by 39°15' N. on the north, 78°30' W. on the east, 37°30' N. on the south, and 80°30' W. on the west.

(c) Protection for Table Mountain Radio Receiving Zone, Boulder County, Colorado. Applicants for a station authorization to operate in the vicinity of Boulder County, Colorado under this part are advised to give due consideration, prior to filing applications, to the need to protect the Table Mountain Radio Receiving Zone from harmful interference. These are the research laboratories of the Department of Commerce, Boulder County, CO. To prevent degradation of the present ambient radio signal level at the site, the Department of Commerce seeks to ensure that the field strengths of any radiated signals (excluding reflected signals) re-

ceived on this 1800 acre site (in the vicinity of coordinates 40°07'50" N Latitude, 105° 14'40" W Longitude) resulting from new assignments (other than mobile stations) or from the modification or relocation of existing facilities do not exceed the following values:

Frequency range	Field strength (millivolt per meter) in authorized bandwidth of service	Power flux density ¹ (dBW per square meter) in authorized bandwidth of service
Below 540 kHz	10	65.8
540 to 1600 kHz	20	59.8
1.6 to 470 MHz	10	65.8
470 to 890 MHz	30	56.2
Above 890 MHz	1	85.8

¹ Equivalent values of power flux density are calculated assuming free space characteristic impedance of $376.7=120\pi$ ohms.

(1) Advance consultation is recommended particularly for those applicants who have no reliable data which indicates whether the field strength or power flux density figures in the above table would be exceeded by their proposed radio facilities (except mobile stations). In such instances, the following is a suggested guide for determining whether coordination is recommended:

(i) All stations within 2.4 km (1.5 statute miles);

(ii) Stations within 4.8 km (3 statute miles) with 50 watts or more effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Table Mountain Radio Receiving Zone;

(iii) Stations within 16 km (10 statute miles) with 1 kW or more ERP in the primary plane of polarization in the azimuthal direction of the Table Mountain Receiving Zone;

(iv) Stations within 80 km (50 statute miles) with 25 kW or more ERP in the primary plane of polarization in the azimuthal direction of the Table Mountain Receiving Zone.

(2) Applicants concerned are urged to communicate with the Radio Frequency Management Coordinator, Department of Commerce, Research Support Services, NOAA R/E5X2, Boulder Laboratories, Boulder, CO 80303; telephone (303) 497-6548, in advance of filing their applications with the Commission.

(3) The Commission will not screen applications to determine whether advance consultation has taken place. However, applicants are advised that such consultation can avoid objections from the Department of Commerce or proceedings to modify any authorization which may be granted which, in fact, delivers a signal at the site in excess of the field strength specified herein.

(d) Protection for Federal Communications Commission monitoring stations:

(1) Applicants in the vicinity of an FCC monitoring station for a radio station authorization to operate new transmitting facilities or changed transmitting facilities which would increase the field strength produced over the monitoring station over that previously authorized are advised to give consideration, prior to filing applications, to the possible need to protect the FCC stations from harmful interference. Geographical coordinates of the facilities which require protection are listed in §0.121(c) of the Commission's Rules. Applications for stations (except mobile stations) which will produce on any frequency a direct wave fundamental field strength of *greater than 10 mV/m* in the authorized bandwidth of service (-65.8 dBW/m^2 power flux density assuming a free space characteristic impedance of 120 times π , or 377, ohms) at the referenced coordinates, may be examined to determine extent of possible interference. Depending on the theoretical field strength value and existing root-sum-square or other ambient radio field signal levels at the indicated coordinates, a clause protecting the monitoring station may be added to the station authorization.

(2) In the event that calculated value of expected field exceeds 10 mV/m (-65.8 dBW/m^2) at the reference coordinates, or if there is any question whether field strength levels might exceed the threshold value, advance consultation with the FCC to discuss any protection necessary should be considered. Prospective applicants may communicate with: Chief, Compliance and Information Bureau, Federal Communications Commission, Washington, DC 20554, Telephone (202) 632-6980.

(3) Advance consultation is suggested particularly for those applicants who have no reliable data which indicates whether the field strength or power flux density figure indicated would be exceeded by their proposed radio facilities (except mobile stations). In such instances, the following is a suggested guide for determining whether an applicant should coordinate:

(i) All stations within 2.4 kilometers (1.5 statute miles);

(ii) Stations within 4.8 kilometers (3 statute miles) with 50 watts or more average effective radiated power (ERP) in the primary plane of polarization in the azimuthal direction of the Monitoring Stations;

(iii) Stations within 16 kilometers (10 statute miles) with 1 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station;

(iv) Stations within 80 kilometers (50 statute miles) with 25 kW or more average ERP in the primary plane of polarization in the azimuthal direction of the Monitoring Station.

(4) Advance coordination for stations operating above 1000 MHz is recommended only where the proposed station is in the vicinity of a monitoring station designated as a satellite monitoring facility in §0.121(c) of the Commission's Rules and also meets the criteria outlined in paragraphs (d)(2) and (3) of this section.

(5) The Commission will not screen applications to determine whether advance consultation has taken place. However, applicants are advised that such consultation can avoid objections from the Federal Communications Commission or modification of any authorization which will cause harmful interference.

(e) In the band 420 to 450 MHz, applicants should not expect to be accommodated if their area of service is within 160 kilometers (100 miles) of the following locations:

- (1) 45°45' N., 70°32' W,
- (2) 64°17' N., 149°10' W,
- (3) 48°43' N., 97°54' W;

within 200 kilometers (124 miles) of the following locations:

- (1) 32°38' N., 83°35' W,
- (2) 31°25' N., 100°24' W;

within 240 kilometers (150 miles) of the following location:

- (1) 39°08' N., 121°26' W;

within 320 kilometers (200 miles) of the following locations:

- (1) 28°21' N., 80°43' W,
- (2) 30°30' N., 86°30' W,
- (3) 43°09' N., 119°11' W;

or in the following locations:

- (1) The state of Arizona,
- (2) The state of Florida,
- (3) Portions of California and Nevada south of 37°10' N,
- (4) And portions of Texas and New Mexico bounded by 31°45' N., 34°30' N., 104°00' W. and 107°30' W.

(f) Licensees planning to construct and operate a new station at a permanent fixed location on the islands of Puerto Rico, Desecheo, Mona, Vieques or Culebra in services in which individual station licenses are issued by the FCC; planning to construct and operate a new station at a permanent fixed location on these islands that may cause interference to the operations of the Arecibo Observatory in services in which individual station licenses are not issued by the FCC; or planning a modification of any existing station at a permanent fixed location on these islands that would increase the likelihood of causing interference to the operations of the Arecibo Observatory must notify the Interference Office, Arecibo Observatory, Post Office Box 995, Arecibo, Puerto Rico 00613, in writing or electronically (e-mail address: prcz@naic.edu), of the technical parameters of the planned operation. Carriers may wish to use the interference guidelines provided by Cornell University as guidance in designing facilities to avoid interference to the Observatory. The notification must include identification of the geographical coordinates of the antenna location (NAD-83 datum), the antenna height, antenna directivity (if any), proposed channel and FCC Rule Part, type of emission, and effective isotropic radiated power.

(1) In services in which individual station licenses are issued by the FCC, the notification required in paragraph (f) of this section should be sent at the same time the application is filed with the FCC, and at least 20 days in ad-

vance of the applicant's planned operation. The application must state the date that notification in accordance with paragraph (f) was made. In services in which individual station licenses are not issued by the FCC, the notification required in paragraph (f) of this section should be sent at least 45 days in advance of the applicant's planned operation. In the latter services, the Interference Office must inform the FCC of a notification within 20 days if the Office plans to file comments or objections to the notification.

(2) After the FCC receives an application from a service applicant or is informed by the Interference Office of a notification from a service applicant, the FCC will allow the Interference Office a period of 20 days for comments or objections in response to the application or notification. The applicant will be required to make reasonable efforts in order to resolve or mitigate any potential interference problem with the Arecibo Observatory and to file either an amendment to the application or a modification application, if appropriate. If the FCC determines that an applicant has satisfied its responsibility to make reasonable efforts to protect the Observatory from interference, its application may be granted.

(3) The provisions of this paragraph do not apply to operations that transmit on frequencies above 15 GHz.

(Secs. 4, 303, 307, 48 Stat., as amended, 1066, 1082, 1083; 47 U.S.C. 154, 303, 307)

[43 FR 54791, Nov. 22, 1978, as amended at 44 FR 77167, Dec. 31, 1979; 47 FR 34420, Aug. 9, 1982; 49 FR 32770, Aug. 16, 1984; 50 FR 39003, Sept. 25, 1985; 54 FR 38680, Sept. 20, 1989; 54 FR 39740, Sept. 28, 1989; 61 FR 8478, Mar. 5, 1996; 62 FR 55534, Oct. 27, 1997; 63 FR 41204, Aug. 3, 1998]

§ 90.179 Shared use of radio stations.

Licensees of radio stations authorized under this rule part may share the use of their facilities. A station is shared when persons not licensed for the station control the station for their own purposes pursuant to the licensee's authorization. Shared use of a radio station may be either on a non-profit cost shared basis or on a for-profit private carrier basis. Shared use of an authorized station is subject to